

**AMENDMENTS TO THE SPECIFICATION:**

Please amend paragraphs [26], [27], [71], [82], [83], [86], [87], [103], [114] of the specification, as originally filed, as follows:

[26] FIG. 5A-5E. SlideMapName Proteomics for sepsis.

[27] FIG. 6A-6E. SlideMapName Proteomics for mortality.

[71] Glass slides were cleaned and derivatized with 3-cyanopropyltriethoxysilane. The slides were equipped with a Teflon mask, which divided the slide into sixteen 0.65 cm diameter wells or circular analysis sites called subarrays [[FIG. 11]]. Printing was accomplished with a Perkin-Elmer SpotArray Enterprise non-contact arrayer equipped with piezoelectric tips, which dispense a droplet (~350 pL) for each microarray spot. Antibodies were applied at a concentration of 0.5 mg/mL at defined positions.

[82] IL-8: IL-8 levels were higher in sepsis patients relative to normal controls at the pre-infusion time point, in both the plasma and serum samples [[FIG. 9]]. The level of IL-8 in sepsis patients declined to match levels in normal controls by day 7. Correlation analysis revealed significant correlation (correlation coefficient>0.8) between the serum IL-8 level in the sepsis group with each of MIP-3 $\beta$ , IL-6, MCP-2, MCP-1, BLC (Table 1). Significant correlation was also observed between plasma IL-8 level and each of MCP-2, BLC, IL-2sR $\alpha$ , IL-6 in the citrate plasma samples (Table 1).

[83] IL-6: Similar to IL-8, IL-6 levels were also higher in sepsis patients relative to normal controls at the pre-infusion time point, in both plasma and serum samples [[FIG. 9]] and levels declined to reach normal control levels by day 7. Correlation analysis revealed significant correlation (correlation coefficient>0.8) between the serum IL-6 level in the sepsis group with each of MIP-3 $\beta$ , MCP-1, IL-8 (Table 1). Significant correlation was also observed between plasma IL-6 level and each of MIP-3 $\beta$ , MCP-1, IL-8 in the citrate plasma samples (Table 1).

[86] MPIF-1: MPIF-1 levels were higher in the sepsis patients relative to the normal controls in both serum and plasma, at all time-points examined [[FIG. 9]]. As time progressed, levels of MPIF-1 declined in the sepsis groups to the levels observed in the normal controls. Correlation analysis did not reveal any significant correlation (correlation coefficient>0.8) between the serum MPIF-1 level and other analytes in the sepsis group in both serum and citrate plasma samples.

[87] IGFBP-1: IGFBP-1 levels were higher in sepsis patients relative to the normal controls levels in both serum and plasma, at all the time-points examined [[FIG. 9]]. As time progressed, levels

of IGFBP-1 declined in the sepsis groups but not to the levels observed in the normal controls. As with MMP-7, sepsis patients exhibited considerable individual variation. Correlation analysis did not reveal any significant correlation (correlation coefficient  $>0.8$ ) between the serum IGFBP-1 level and other analytes in the sepsis group in both serum and citrate plasma samples.

[103] Glass slides were cleaned and derivatized with 3-cyanopropyltriethoxysilane. The slides were equipped with a Teflon mask, which divided the slide into sixteen 0.65 cm diameter wells or circular analysis sites called subarrays [[FIG. 14]]. Printing was accomplished with a Perkin-Elmer SpotArray Enterprise non-contact arrayer equipped with piezoelectric tips, which dispense a droplet (~350 pL) for each microarray spot. Antibodies were applied at a concentration of 0.5 mg/mL at defined positions.

[114] AgRP, MMP8, IL18, MIF: AgRP, MMP8, MIF and IL18 levels were higher in sepsis patients than in normal controls in both plasma and serum samples [[FIG. 12]]. The differences were more pronounced in serum than in plasma, and observed at all time points. MMP8 showed the greatest magnitude of difference between sepsis and normal controls (~25-fold). In fact, this difference was even greater than measurable in neat samples since many sepsis sample values for MMP8 were saturated. It should be noted that MMP9 exhibited a similar profile to MMP8.